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NEWSLETTER OF THE LONDON CHAPTER,
ONTARIO ARCHAEOLOGICAL SOCIETY
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LONDON CHAPTER OAS

November, 1994

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IT'S TIME FOR.....
THE CHAPTER'S ANNUAL CHRISTMAS PARTY!!!!

(and annual chapter business meeting)

451 TECUMSEH STREET EAST (OLD SOUTH LONDON)
SATURDAY, DECEMBER 10TH, AFTER 6PM

Ho, Ho, Ho...ly COW, it's that time again; time to wrap up the 1994 year and look forward to 1995, while eating, drinking and generally having a good time (OK, OK, its true that the Chapter also must hold it's annual business meeting, but that should take 10 minutes...tops!). This year's hosts are Neal Ferris and Manina Jones, at 451 Tecumseh Street East. That's in the Old South of London, at the corner of Tecumseh and Langley, by South High School, between Ridout St. and Grand Ave. (432-2165). This year, rather than the same old Turkey, we're featuring **FAVOURITE FINGER FOODS!!** See inside for further details, and call Neal and Nina to co-ordinate what to bring!

Next Month: Speaker Nights begin again on January 12th at Grosvenor Lodge. This month we'll feature John MacDonald, recounting his tales from up in the Arctic, searching for the lost Franklin Expedition members. Meeting time is 8 PM.

Chapter Executive

ANNUAL RATES

Individual.....	$15.00
Family.....	$18.00
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EXECUTIVE REPORT

Well, as we all can tell from the ole' calendar on the wall, another year is quickly coming to a close. And around here, that usually means two things: A new Executive needs to be established for the Chapter, and membership fees for 1995 are now due. As far a dues are concerned, it would appear that, once again, rates will stay where they've been the last several years (see the cover of the newsletter for current rates). So please help us out by sending your dues in early: we hate having to chase people come March!!

At last count, all Executive members were planning to stay on for the 1995 year, and one more person stepped forward to be a part of the Executive. However, this doesn't mean we now must hold an election (after all, we've only ever had two of those in the history of the Chapter). Rather, Pat has suggested that the number of directors be expanded to 5. Now what are all these people going to do, you might ask? Well, there has been some discussion of delegating various functions of the Chapter to sub-committees that can address the specific issues associated with that one area (eg. publications, operations, community support, social events, etc.). The idea would be that a member or two of the Executive, along with one or two "members at large," would form these committees, thus giving our swelled Executive things to do, while giving opportunities for members of the Chapter who can't commit to a lot a specific area or two in which they can make a meaningful contribution. Anyways, this is all talk at the moment, but if you're interested in learning more, come on out to the Chapter Christmas Party and annual business meeting.

SOCIAL REPORT

Based on the somewhat limited feedback received in the last few weeks, we've decided not to do the "traditional" thing, and cook a turkey as the main focus of the Christmas party meal. Rather, this year it was decided to go FUN!! So, the theme of the food portion of the Christmas party will be **Favourite Finger Foods**. That's right, after all, why do we like going to parties (beyond the music, drink and good company), but to snack away on those little bit-sized goodies of various kinds. So, we're looking for snack food suggestions. Feel free to bring along a platter of cheeses, dolmathes, samosas, chicken wings, spring rolls, those fried cheese things, or whatever it is you like best to munch on at parties. Or bring something that people can dip. Or a salad or dessert. BUT PLEASE....call Neal and Nina (433-8401 days; 432-2165 evenings) so we can co-ordinate everything; last thing we need is 200 brownies and 1 small plate of chesse bits!! See the cover of **KEWA** for more details.

EDITOR'S REPORT

This month we once again benefit from the activities of the Ministry of Transportation's southwest archaeological CRM program. Enclosed is a report by Paul Lennox, on the late Middle Woodland Dingman Creek site, located immediately west of London along Highway 4, just south of Lambeth. Once again MTO's investigations documented a site type - a small, diffuse short term camp site - not commonly known from the archaeological record. Paul tries to show us exactly how it fits into that record, and how it should fit into our notions of what is "important."

Tragically, I must again appeal to all of you out there sitting on a small site report or two, to please send them in! Our pile of submitted material ready to go is down to 1 item, which might not fill an entire issue. So help keep **KEWA** strong - please give us stuff NOW!

The Dingman Creek Site:
A Middle Woodland Component In Middlesex County, Ontario

Paul A. Lennox

Introduction

Investigations concerning the Middle Woodland Period have held the interest of both amateurs and professionals since the dawn of North American archaeology. Much of the early emphasis can be attributed to the elaborate and conspicuous ceremonial complex which involved the building of substantial burial mounds and the exchange of materials and ideas over much of the North American continent. The focus of more recent research into the settlement-subsistence patterns accompanying the ceremonial aspects of this cultural period has often been directed toward the larger and most productive habitation sites. While these investigations have provided the quantities of cultural material that have allowed for the characterization of general trends throughout this period, the complexity of these components - a result of their locations in areas of abundant and predictable resources and their reoccupation, perhaps on a seasonal basis, over long periods of time - has meant that much of the variation n these assemblages is "smeared" between the multiple occupations represented. The fine tuning of the spatial and temporal trends within the Middle Woodland Period thus await the examination of "tighter" assemblages.

Site Location

The Dingman Creek Site (AfHh-161) is situated to the southwest of the City of London and immediately south of Lambeth, and about 50 metres north of Dingman Creek (Figure 1). Dingman Creek is a tributary of the Thames River and the site lies approximately 14 km from the creek's confluence with the Thames River to the west or 7 km due south of this major southwestern Ontario waterway. During most of the year the creek by the site is only a few metres wide, but the creek overflows its banks annually to encompass its floodplain, which borders the north side of the creek at this location. The Dingman Creek site lies on top of the floodplain terrace where a drop of about 1 metre leaves the site dry during times of peak runoff. Topographically, the broad floodplain is all that separates the site from the creek and aside from this terrace edge the landscape in the immediate vicinity of the site is relatively flat (Figure 1).

Physiographically the lands bordering Dingman Creek are described as a spillway (Chapman and Putnam 1984: Map # 2225). Given this, we might expect to find coarser textured soils here but these must have been buried at the site location since the soils contained only a small amount of gravel in what otherwise might best be described as a clay loam.

At the time of excavation these soils retained enough moisture so that artifacts were consistently coated with soil (mud). Thus all materials retained by our 5 mm mesh field screens had to be returned to the lab for water screening. It was only after this residue was water screened (using the same mesh as was used in the field) that the cultural material could be recognized and sorted. With the use of water screening, artifact recognition and recovery was optimal.

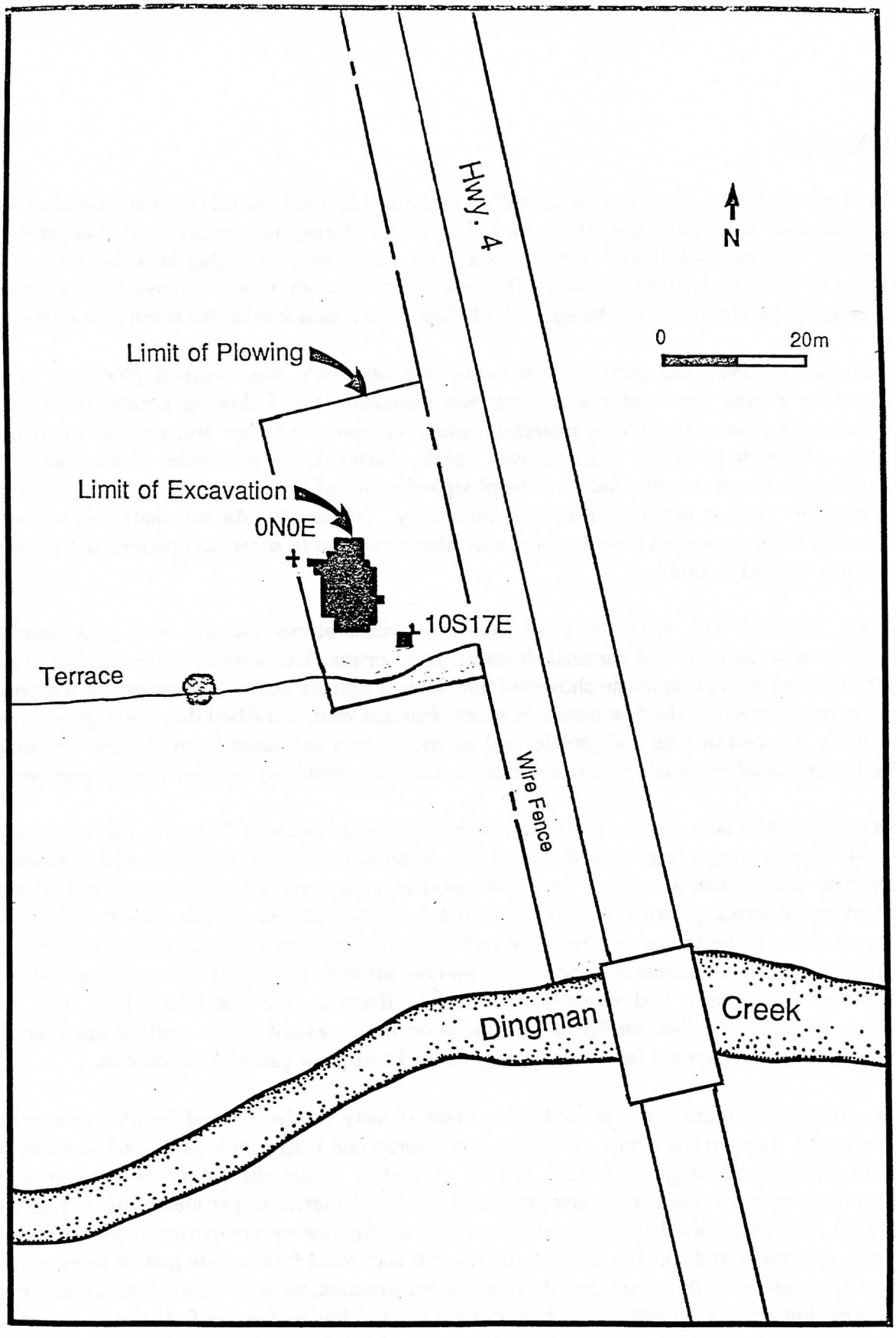

Figure 1: Dingman Creek Site Location and Limits of Excavation.

Background

The Dingman Creek site was first identified in the fall of 1987. At that time a temporary detour was proposed to bypass the Dingman Creek bridge during its replacement. The area to be impacted by construction was shovel tested at ten metre intervals using hand held 5 mm mesh screens to assist in artifact recovery. This test pitting procedure was not overly productive but did reveal several pieces of debitage and a biface from a meadow on the north side of the river.

In the fall of 1988 the pasture surrounding the discovery was contract ploughed to allow weathering during the winter and a surface inspection the following spring. This exercise produced 19 pieces of cultural material, mostly chipping debitage and several small pottery sherds. Although 11 of the artifacts were tightly clustered, the remainder of the surface finds were scattered over the remainder of the ploughed area and likely attest to the ephemeral use of the area by various groups throughout prehistory (Figure 2). As we shall see, some tools recovered from the excavations are probably also attributed to other occupations but fortunately these are limited in number.

A grid, oriented with magnetic north was established across the site with grid coordinates provided as a distance and cardinal direction from origin. Excavations were conducted in one metre squares with ploughzone shovelled into screens and the subsoil examined for the presence of cultural features. In the few instances where features were identified they were given numbers (eg. F-3), mapped in plan and profile, and excavated as a unit apart from the grid provenience. The Locations of materials recovered from features are provided by their feature numbers.

It is of interest to note that the field had not been ploughed in about 25 years. This is particularly notable since a comparison of undisturbed sites excavated in woodlots produced four times more projectile points than sites that were cultivated annually and subject to uncontrolled surface collecting (Warrick personal communication Feb. 1994). Based on this observation it can be suggested that if the Dingman Creek site had been cultivated on a regular basis it is likely, given its proximity to road access and the limited number artifacts recovered, that uncontrolled surface collection would have had severely detrimental effects on the site assemblage. The limited amount of tillage is also notable in consideration of the extent of the artifact distribution not likely having been spread far by the plough from its original place of deposition.

Our excavation limits were guided by artifact density as determined by the excavation of ploughzone. Toward the centre of the area excavated one metre units produced as many as 32 pieces of lithic debitage and three pieces of pottery while the limits of excavation were determined by excavation units that produced roughly 10 artifacts per metre square (see Figure 3). This strategy resulted in the excavation of 91 contiguous square metres of ploughzone over an area that measured roughly 13 by 8 metres. An additional four square metres were excavated about four metres to the southeast of the block excavations, in order to explore surface finds in that area; but artifact densities were considered to be too low to warrant further excavations here. Two 50 cm test units were also excavated to the south of the block excavations but produced no cultural material.

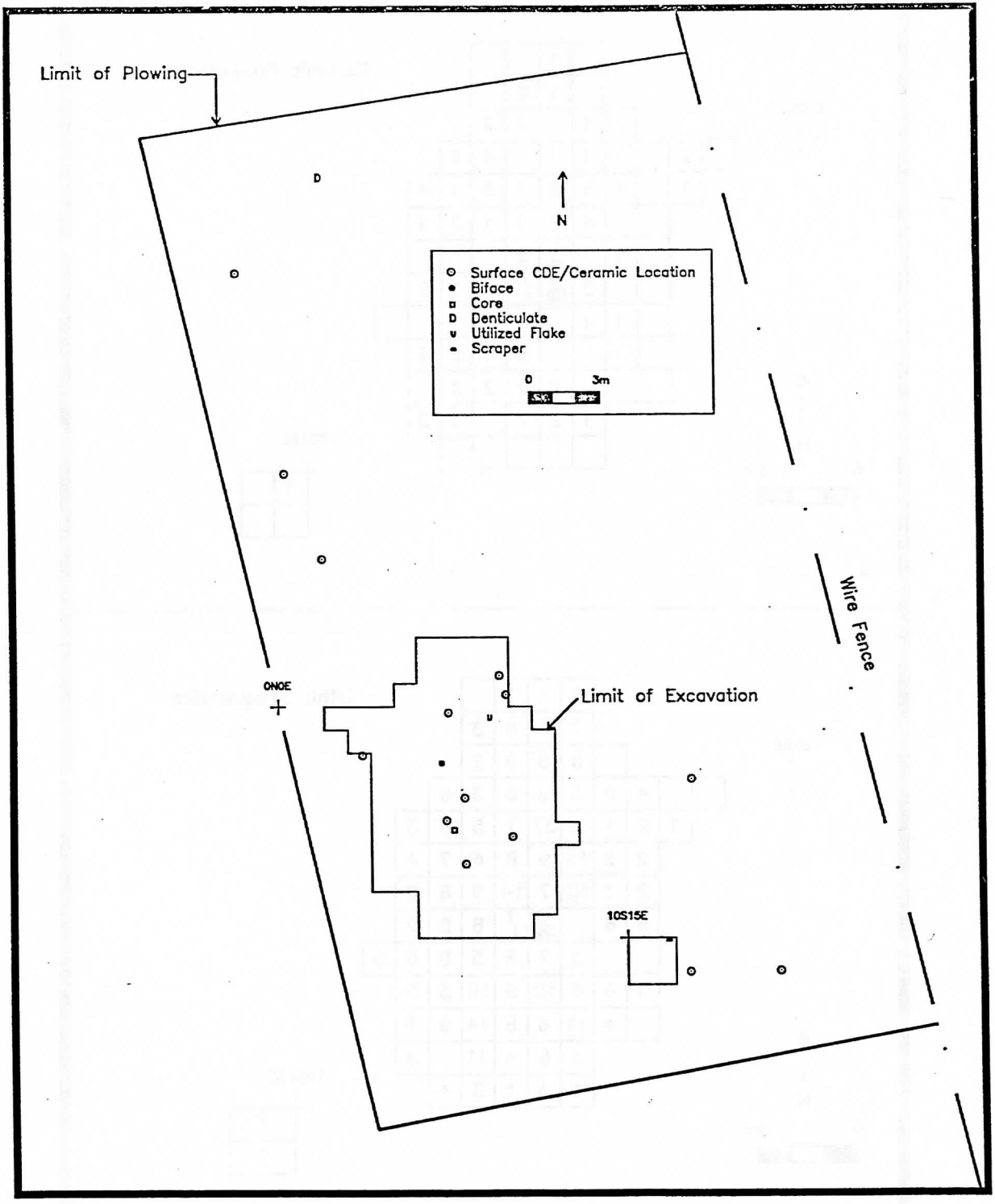

Figure 2: Surface Collected Artifact Locations and Limits of Excavation.

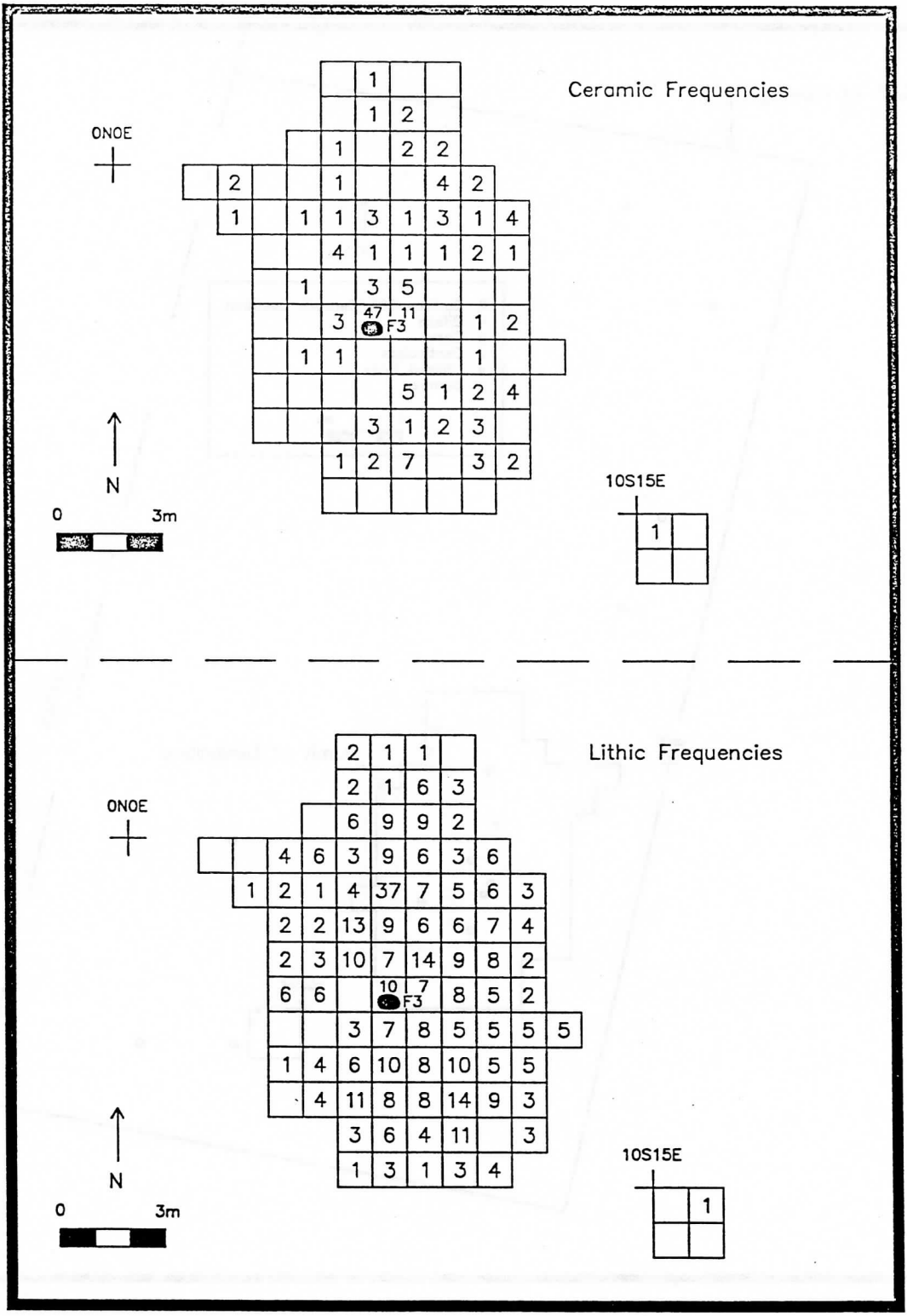

Figure 3: Excavated Ceramic and Lithic Recoveries by Unit

Features

A total of 5 subsoil features were identified at the base of the ploughzone. They appeared as slightly deeper pockets of topsoil, occasionally mottled with subsoil and small "flecks" of charcoal in the lighter coloured subsoil. These were mapped by triangulation, drawn in plan view, and profiled. Because of the small number of features and the limited sample volume, the fill from all features was subjected to flotation.

Four of the five features identified produced very little cultural material. A single flake was recovered from Feature 1, three flakes were recovered from Feature 2 while Features 4 and 5 contained no cultural material at all. As such they are thought to be of dubious significance and are not considered further in this report.

Only one feature, Feature 3, yielded any quantity of cultural material and is undoubtedly affiliated with the occupation; yet, the presence of this feature may simply reflect casual disposal of cultural materials into a natural depression since other characteristics of this feature were no different than for the features that contained little or no cultural material. Feature 3 consisted of a shallow, oval basin measuring 44 cm long, 30 cm wide and 6 cm deep. The feature fill consisted of dark brown topsoil with charcoal flecks. The light fraction of the flotation sample produced a small quantity (less than a gram) of unidentifiable wood charcoal fragments. The feature also contained numerous pieces of pottery and 3 pieces of lithic micro-debitage. Although the quantity of ceramic fragments is substantial, with the exception of one sherd perhaps from a juvenile vessel, the remainder appear to be from a single vessel.

Artifact Analysis

As indicated in Table 1, the Dingman Creek collection is dominated by lithic debitage and tools. And while the ceramic assemblage is sizeable, analysis shows that only a few vessels are present.

LITHICS

Debitage: With the exception of only 4 flakes and a small amount of micro-debitage recovered from feature contexts, most debitage was recovered from the ploughzone. The lithic debitage was distributed in low frequencies across the area of the site excavated, with a tendency for material to cluster toward the central portion of the site (Figure 3). The lithic debitage was analyzed for material type, morphology, thermal alteration and utilization.

With respect to the chert types represented, the predominant lithic material used at Dingman Creek was a blue-grey translucent Kettle Point chert (Table 2). This type comprises 82% of the debitage assemblage. With the high incidence of secondary flakes (n=165) compared to primary flakes (n = 95), and cortex appearing on only 49 of the 406 pieces of Kettle Point chert, we are left with the impression that the final stages of tool production and resharpening constituted the major lithic reduction activity at the site. It was also noted during the debitage analysis that the primary flakes, although morphologically within that category, were relatively small.

Table 1
Dingman Creek Artifact Frequencies

Artifact Type	Frequency	Percent
Lithic debitage	495	66.0
Cores	5	0.7
Scrapers	7	0.9
Projectile Points	5	0.7
Anvilstone/Mano	2	0.3
Metate	1	0.1
Ceramics	235	31.3
TOTAL	750	100.0

Table 2
Lithic Debitage Material Type and Flake Morphology

Material Type	Flake Type			TOTAL
	Primary	Secondary	Fragment	
Kettle Point	95	165	146	406
Onondaga	15	12	13	40
Unknown	7	14	28	49
Total	117	191	187	495

The primary source of Kettle Point chert is from the vicinity of Kettle Point on the southeast shore of Lake Huron (Janusas 1984). And although glacial ice of the Huron lobe redeposited this material to the southeast of the primary source, it is rare to see it naturally occurring as far east as London. Since the occurrence of both tabular and nodular cortical surfaces was noted on this material in similar frequencies it is difficult to determine a preference for the use of either primary or secondary sources.

A number of examples of locally available Onondaga chert nodules of a mottled grey and brown chert, along with other "unknown" cherts, were originally collected from the site as debitage but subsequently identified as non-cultural, based on the absence of percussion flaking attributes and the presence of heavily patinated surfaces. These chert nodules attest to their availability locally, likely derived from primary sources through glacial and fluvial transport.

Present in small quantities are 17 secondary flakes and flake fragments that compare favourably to samples of chert from Flint Ridge, Ohio. The presence of this material is not unusual on a Middle Woodland site in southwestern Ontario (eg. Wilson 1990: 60), but there is some question as to the material's identification. The flakes are small, apparently removed in resharpening a dulled biface, and could be mistaken for Kettle Point chert. Although the possibility of this material's presence is noteworthy, since the identification is problematical the material appears in Table 2 combined with the Kettle Point chert category.

Evidence of thermal alteration on the lithic debitage was noted, appearing in the form of pot lidding and as changes in the colour of the material which often becomes excessively dark, light or reddish upon exposure to heat. While this may have been intentional "heat treatment," it is most likely that this thermal alteration is evidence of unintentional heating from exposure to a hearth. Seventy-six pieces of debitage show such evidence and although most of this material is widely distributed across the site in low frequencies, 23 of the 37 flakes recovered from 1S7E exhibit these characteristics. This is a strong suggestion for the presence of a hearth, although there was no evidence of such a feature in the subsoil below the ploughzone.

Utilized Flakes: The lithic debitage from the site was examined by two experienced researchers in order to identify use wear. The fact that one analyst identified three times more utilized flakes than the other indicates the inconsistency in our understanding and our approach to this tool type. Although it is "standard practice" for many researchers to identify and describe their assemblage of utilized flakes, rarely have these descriptions resulted in what could be considered reliable, let alone significant, interpretations. The problems of identification and interpretation are compounded on plough disturbed sites like Dingman Creek.

At Dingman Creek, the more conservative identification of utilized flakes was based on the presence of use retouch: the removal of a continuous series of small flakes less than 1 mm long. Use retouch, thought to be the result of the utilization of flake edges to perform scraping or cutting tasks, appears on 38 specimens. These occur on both Kettle Point and Onondaga Chert flakes, proportional to the relative abundance of these materials on the site. Often these utilized specimens were made on primary flakes, suggesting that the type of chert was not a significant factor in selecting flakes, but rather that the size of the flakes selected was of consideration.

One third of the utilized flakes show use retouch that continued for less than a centimetre. These edges were often irregular in form, either as a result of intermittent use retouch, or as a result of the size of the flake edge that actually was in contact with the material being cut or scraped. While use retouch could occur on either one or both faces of the utilized edge, in most instances use retouch was unifacial, suggesting unidirectional use contact with the object material. While unidirectional use wear might suggest a scraping function, the use of irregular tool edges such as those from Dingman Creek do not well suit a hide scraping function. It is likely that these flakes were used on other materials.

Another third of the utilized flakes possessed continuous use retouch along a straight or slightly convex lateral or distal edge. The utilized edges on these specimens tended to be more acute

angled than those mentioned above, perhaps suggesting that they would have served a cutting function. The remaining utilized flakes consist of incomplete flake fragments. Either broken through use or perhaps by the plough, it is difficult to quantify their attributes more precisely.

The distribution of utilized flakes across the site was examined for patterned occurrences but they appear widely distributed across the area excavated.

Cores: The five specimens recovered from the Dingman Creek site are small, exhausted or fragmentary cores classified as random (2) and bipolar (3), and made on Onondaga (1) and Kettle Point (4) chert (Table 3). The small number of cores and their small size support the notion of a the debitage assemblage lacking the initial stages of lithic reduction. The use of small pieces of chert to obtain a few utilizable flakes appears to have been the main product of core reduction. Formal lithic tools were likely brought to the site and maintained through resharpening or replaced as required by tool blanks, preforms or the reworking of other tools in an advanced state of completion.

Table 3

Core Descriptions (measurements in mm)

Location	Core Type	Chert Type	Length	Width	Thick ness	Cortex
CSP #3	Bipolar A-?	KP.	27+	19	12	Nodular
0N7E	Random	Onon.	42	28	19	Nodular
0N7E	Bipolar P-?	KP.	25+	13	7	Absent
2S9E	Bipolar P-A	KP.	29	22	8	Nodular
7S10E	Random	KP.	50	31	7	Nodular

Scrapers: Seven scrapers and scraper fragments recovered from this site range from systematically retouched flakes to more extensively worked or formalized tools (Table 4). All possess the characteristic steep unifacial retouch on their regularly formed, gently rounded bit edges. The largest category consists of five flake scrapers that may be more precisely referred to as end scrapers, since retouch occurs on the distal edge and dorsal surface of primary flakes. As seen in Figure 4: f-i, these items are not particularly outstanding specimens, appearing to have been functional but expedient. It should be noted that the chert type identification for the specimen from 2S8E is tentative since the chert is thermally altered.

The remaining two scrapers appear to have been made on bifaces, and may be reworked or recycled projectile point tips. The proximal end of the complete specimen has been significantly narrowed or "stemmed" perhaps to be held in a socket (Figure 4: j). The other scraper is likely a reworked or recycled projectile point tip. The beautifully made distal end of the projectile is now the scraper base and shallow notches have been provided in the lateral edges to aid in hafting (Figure 4: k). The bit edge has been broken from the scraper base, making this piece only tentatively identifiable. This specimen is the only scraper made on Onondaga chert and judging from the size of the scraper fragment and consideration of the original form of the tool, it has likely been obtained in trade or by direct procurement from a primary chert source.

Table 4
Scraper Descriptions (measurements in mm)

Location	Chert Type	Scraper Type	Measurements			Retouched Edge	
			Length	Width	Thick.	Shape	Length
CSP #14	KP	Flake	20	20	2	Str.	17
6S7E	KP	Flake	16	20	4	Cv.	20
2S8E	KP	Flake	24	23	3	Cv.	20
5S8E	KP	Flake	33	27	7	Cv.	28
7S5E	KP	Flake	36	15	8	Cv.	14
1N7E	KP	Hafted	37	22	6	Cv.	18
1S7E	Onon.	Hafted	50+	21+	8	na	na

Projectile Points: Five projectile points and point fragments were recovered from the Dingman Creek site (Figure 4). Three point bases are of most interest since they all exhibit a range of forms that have Middle Woodland affinities. One of these specimens (Figure 4:a) is quite distinctive because of its thinness, its high side-notches and its concave base, making the lateral edges of the base possess protruding ears characteristic of the Raccoon Notched (Mayer-Oaks 1955:84) or Port Maitland (Ritchie 1971:125) point type. Another point base (Figure 4:b) is identified as a Saugeen Point (Kenyon 1979), possessing a convex and lightly ground basal edge and exhibiting wide side-notches. This item is particularly distinctive because its material has been identified as Burlington chert (Wm. A. Fox personal communication: April, 1994). This chert type (whose primary sources exist in the states of Arkansas, Indiana, Illinois and Missouri), has rarely been identified on Ontario sites. Interestingly this material was also recently identified from the Middle Woodland Bressette East site, located on the southeast end of Georgian Bay (Dodd: n.d.). The remaining Middle Woodland point base also appears to represent a Saugeen Point (Figure 4:c). It is of Onondaga chert and is also side-notched with slight grinding of the basal edge.

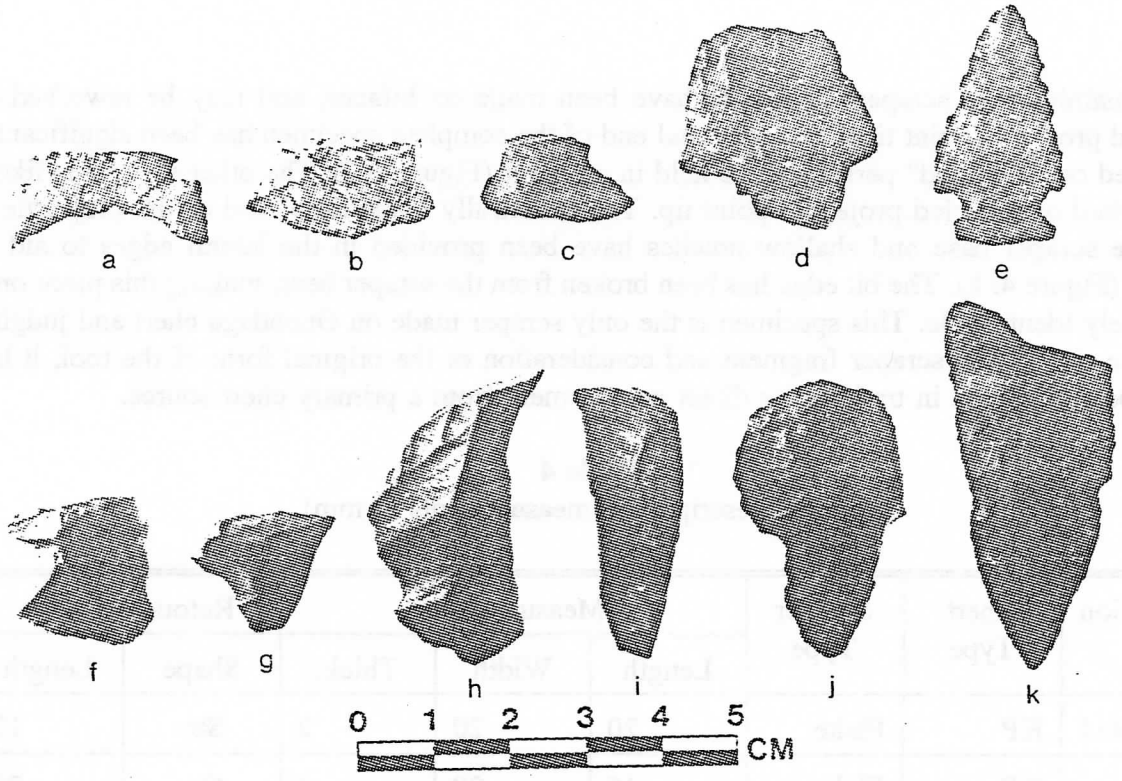

Figure 4: Projectile Points and Scrapers. 4a: Port Maitland base of Onondaga chert (2S9E-3S8E); 4b: side-notched Saugeen point base of Burlington chert (2S10E); 4c: side-notched Saugeen point base of Onondaga chert (6S10E); 4d: point fragment of Onondaga chert (9S8E); 4e: Late Archaic point of Onondaga Chert (4S8E); 4f-i: flake scrapers of Kettle Point chert (CSP#14, 6S7E, 5S8E, 7S5E); 4j: stemmed/hafted endscraper of Kettle Point chert (1N7E); 4k: notched/hafted endscraper of Onondaga chert (1S7E).

There are difficulties assigning the two remaining projectile points to the Middle Woodland occupation. One point of Onondaga chert (Figure 4:d) exhibits crushing at its proximal and distal ends, and appears to have been either reworked, bipolared, or damaged from impact. Likely once possessing a stemmed base, and still retaining evidence of nearly square shoulders, few other characteristics are available to allow for classification or cultural affiliation to be determined.

Another complete projectile point (Figure 4:e) is likely of Archaic affinity. While it may be an example of a Crawford Knoll Point (Kenyon 1980), the serrated blade edges allow for some reservations in this identification. The small point is of Onondaga chert and exhibits corner notches and a lightly ground basal edge. It likely constitutes an "isolated find" attributable to use of the area during the Archaic Period.

Anvilstone-Mano & Metate: A waterworn granitic river cobble recovered from the site is oval in plan and plano-triangular in cross section. It measures 75 mm long, 61 mm wide and 50 mm thick. It exhibits a pecked depression that measures 12 mm in diameter and 2 mm deep on one side, opposite a broad flat surface on the other. The tool is fire cracked into about 10 pieces,

most having been recovered from 2N7E. While intentional modification is not extensive it would have served well in food processing. Another fragment from what appears to have been an identical specimen was recovered from 3S8E.

Also badly fragmented, with most surfaces exfoliated, a granitic cobble from the site shows a ground and slightly concave surface. It is interpreted, with little difficulty, to be a metate fragment. This specimen was recovered from 6S7E.

CERAMICS

While the Dingman Creek site produced over 200 pieces of pottery, most are microsherds, and their recovery is attributed to the water screening of ploughzone. The distribution of pottery across the site demonstrated a strong association with the ploughzone over Feature 3 (Figure 3). That feature also contained an abundance of microsherds, 20 analyzable bodysherds, a reasonably large section of a vessel rim and a fragment from a small juvenile vessel.

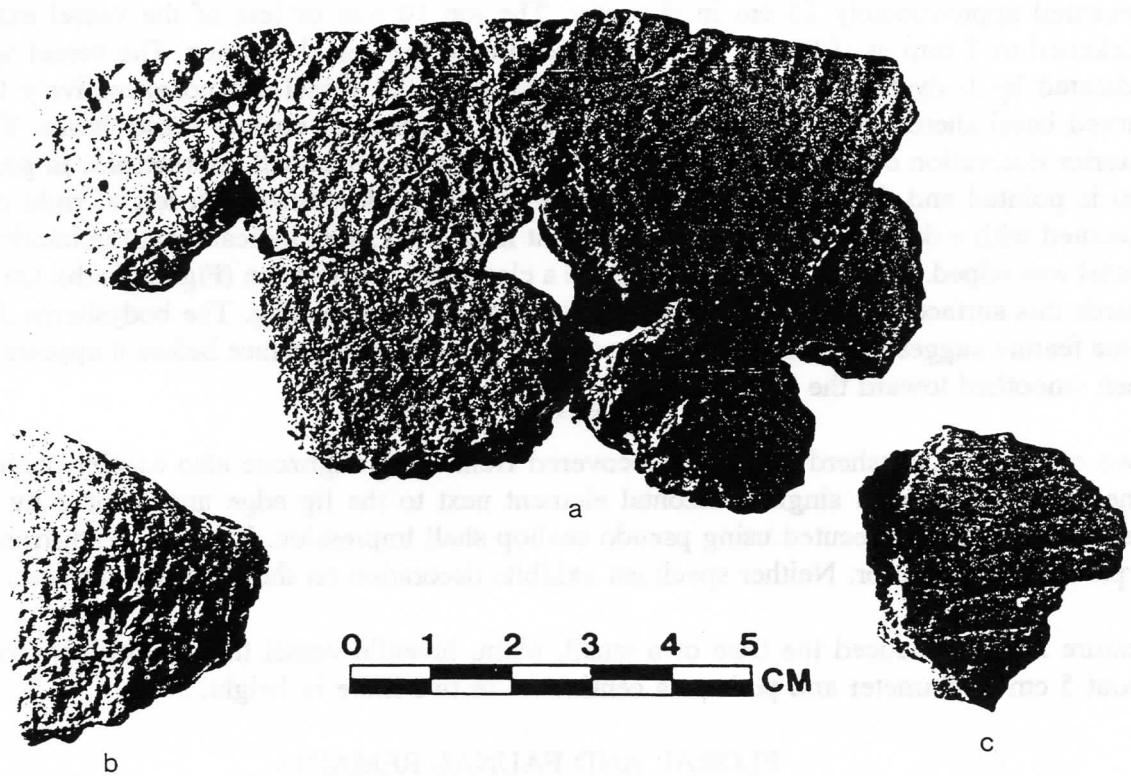

Figure 5: Dingman Creek Ceramics. 5a: rimsherd from F-3 exhibiting pseudo scallop shell impressions; 5b: fabric impressed bodysherd from the same vessel; 5c: bodysherd with plain linear stamp impressions.

As is typical of Middle Woodland vessels, manufacture using the coil method has resulted in the appearance of numerous coil breaks on the ceramics recovered from Dingman Creek. Tempering particles are large but not abundant and are rarely visible on the exterior surfaces of sherds. The temper consists of crushed granitic materials as large as 4 mm. Firing appears to have been incomplete or at low temperatures, since sherd cross sections often exhibit dark interiors with lighter grey-brown or reddish-brown interior and exterior surfaces.

The bodysherds from the site are often fabric impressed as is the vessel represented by the large rimsherd. In some instances, exterior bodysherd surfaces are smooth or plain, suggesting that these sherds may come from another vessel, or more likely are from the base of the first vessel. Twelve bodysherds, all recovered from the ploughzone, are decorated by the impression of a linear tool on smooth vessel surfaces. In four instances the tool was plain (Figure 5:c), while five others possess pseudo scallop shell impressions and the remaining three were executed with a finely toothed dentate stamp.

The few rimsherds recovered all have pointed lips. Slightly concave exterior surfaces indicate slightly constricted necks or flaring rims. The larger vessel segment from Feature 3 (Figure 5:a) consists of a rim portion. Based on the curvature of the rimsherd the ceramic vessel would have measured approximately 15 cm in diameter. The top 10 mm or less of the vessel exterior is thickened to 7 mm as if the lip had been folded onto the vessel exterior. The vessel walls, as indicated by bodysherds, thicken to 11 mm lower on the vessel but no excessively thick or curved basal sherds were recovered to suggest the presence of conical vessel bases. The only exterior decoration consists of a band of oblique pseudo scallop shell impressions. In profile the rim is pointed and the bevelled portion of the interior is decorated with left to right obliques executed with a dentate stamp. Below this, light horizontal striae indicate that the interior of the vessel was wiped. The vessel exterior exhibits a clear fabric impression (Figure 5:a,b). On smaller sherds this surface treatment might be mistaken for cord roughening. The bodysherds from the same feature suggest that the fabric impression continued some distance before it appears to have been smoothed toward the bottom of the vessel.

Two other small rimsherd fragments recovered from the ploughzone also exhibit pointed lips. One from 1N8E has a single horizontal element next to the lip edge underscored by oblique elements. Both are executed using pseudo scallop shell impression. The other rim, from 6S8E, is plain on the exterior. Neither specimen exhibits decoration on their interior surfaces.

Feature 3 also produced the base of a small, plain, juvenile vessel that would have measured about 5 cm in diameter and perhaps a centimetre or two more in height.

FLORAL AND FAUNAL REMAINS

Flotation samples were collected from all features but produced very little other than some small pieces of wood charcoal too small to be identified. Also, no faunal remains were recovered from feature contexts suggesting that faunal preservation at the site is poor. The fact that some animal bone was recovered from the ploughzone is probably not of significance, although this material

is in poor shape suggesting that it is of some antiquity and may be part of the Middle Woodland assemblage. None were identifiable, other to note that 7 are attributable to the long bones of large mammals and 3 could only be identified as belonging to medium to large-sized mammals.

Discussion

The identification of the Dingman Creek site through the shovel testing of a meadow, its subsequent ploughing to help identify size and extent, and the excavations which followed, all revealed a small cluster of artifacts that can be attributed to a brief occupation during the later part of the Middle Woodland Period. Determination of the date of the occupation at Dingman Creek is not difficult despite the limited size of the assemblage and the absence of radiocarbon dates. Occupation during the later part of the Middle Woodland Period is clear from the point styles and the ceramics recovered from our excavations.

The majority of artifacts were distributed in an area that measured about 12 metres north-south and 8 metres east-west. The continuous nature of this distribution suggests a single event created by a small and undivided group of people, rather than several disassociated components over a longer duration. Central within this artifact cluster was a subsoil feature, perhaps simply a remnant of a natural depression. It contained a relative abundance of pottery fragments representing only a few vessels. Several metres to the north, a concentration of lithic debitage exhibited a high proportion of thermally altered material suggesting a hearth once existed in that area, but had since been destroyed by the plough.

Analysis of the artifacts recovered indicates that a broad range of domestic and utilitarian activities are represented in the archaeological record at this small site. Scrapers, projectile points, utilized flakes, plant processing equipment and cooking implements indicate that hunting and gathering were the main subsistence pursuits; allowing for the acquisition and preparation of a broad range of foods, the maintenance of hunting and food processing equipment and the refinement of hides for subsequent use in making clothing, footwear and other utensils. These tools and materials suggest a centre for day-to-day activities of a small scale and varied nature such as might be expected of a short term family encampment.

The spatial separation of ceramic and lithic refuse in the vicinity of a hearth, and in the central part of the artifact scatter, may be read as distinct activity areas representing the organization of limited utilizable space perhaps in accord with the division of labour. The small size of the artifact scatter is comparable to documented Middle Woodland houses (Wright and Anderson 1963:15), and this, together with suggestions of a central hearth, support the interpretation of a structure. However, in the absence of post moulds or storage pits, confirmation of this inference must remain speculative. But it is worth noting that the storage of food in pits below the ground surface and well preserved deep post mould patterns for small temporary structures are unlikely on such small components occupied during the Middle Woodland period.

While the above discussion is presented in support of the suggestion that a house may have been present at the site, it should also be noted that a similar distribution of ceramic and lithic debris

on either side of a hearth has been reported at the 17th century Iroquoian Alder site (Hagerty and Lennox 1990). There, despite the good preservation of subsoil features during this period, a structure or shelter of any kind was not in evidence, nor was it suggested. In the absence of structural evidence, and given that the site was located within sight of a major village, this small and far less prolific component had been interpreted simply as an outside-of-village activity area (Hagerty & Lennox 1990). Without a doubt, our understanding and interpretation of the evidence for the presence of structures, in the absence of obvious features such as post moulds and hearths, requires further and considerable inquiry. Attempts in this direction have been made where the distribution of artifact types, their frequency, the size of artifact concentrations and/or the location of thermally altered lithic debitage all can provide clues to the patterns of the use of space on archaeological sites (eg. Lennox 1986b and 1990). These "clues" can suggest the presence of a structure, its size and organization, where actual sub-surface feature data is difficult to obtain. Surely, for all our data collection and studies conducted on these types of distributions at sites where house patterns and hearth areas are less difficult to interpret, we can make considerably more progress in the interpretation of earlier settlements.

Returning to the Dingman Creek artifact assemblage, the largest proportion is composed of lithic debitage, the vast majority of which is Kettle Point chert. This assemblage is of particular interest for several reasons. First, because the primary source is a considerable distance (approx 60 km) to the west along the southeastern shore of Lake Huron, and secondly, because it is rare to see this much Kettle Point chert being used such a great distance east of the primary source (eg. Fox 1982:4; Janusas 1984; Poulton 1985:111; Wilson 1990:59, 1994:12). Despite the fact that our understanding of the distribution of Kettle Point chert may be blurred by the availability of secondary sources to the south and east of the primary source, its frequency on the Dingman Creek site can still be considered anomalous. Whether this high frequency indicates the greater accessibility of the material source either by direct procurement or through exchange; or whether this is a temporal trend perhaps typical of the Late Middle Woodland occupation of southwestern Ontario; or whether this is a unique or perhaps limited incident, should be born in mind when additional samples become available.

On the similarly Late Middle Woodland Fitz site (Lennox 1986a), the use of Kettle Point chert is very limited suggesting either that the popularity of this material as witnessed at Dingman Creek quickly diminished, or more probably, that the greater distance to the source was a limiting factor in that instance.

Despite the relative abundance of Kettle Point chert at the Dingman Creek site in comparison to that reported for earlier Middle Woodland components, such as the Boresma site located about 10 kilometres to the west (Wilson 1990:59), similarities in material use and conservation suggest that distance to the chert source was a controlling factor throughout the Middle Woodland. Yet, it is noteworthy that although Boresma is closer to the Kettle Point source than the Dingman Creek site, the lesser importance of Kettle Point chert at Boresma suggests distance was not the only limiting factor in its acquisition. With respect to elucidating these trends, it would be useful to examine the differences in the use of Kettle Point chert during the various occupations represented at Boresma, particularly since the sample size is so large and the separation of the

debitage assemblages from those stratified occupations makes such determinations possible.

The majority of the waste flakes from Dingman Creek are secondary flakes, indicating a concern with the latter stages of lithic reduction, including such tasks as biface thinning and resharpening. It may be that tool blanks and finished tools of Kettle Point chert were brought to the site from elsewhere and were completed here for use and maintained in usable form. The small size of the cores recovered from the site, and the presence of cortex on several of these, also would seem to support this suggestion, since the cores appear to have been too small to provide flake blanks of the appropriate size for the tools recovered here. As well, although there appears to have been some use of local, Onondaga chert pebbles, particularly for more expedient tools, the more formalized tools of Onondaga chert appear also to have been brought to the site in a finished or near finished state.

All this suggests, perhaps with no surprise, given the small size and limited duration of the occupation, that the Dingman Creek site was closely affiliated with another component or components where access to these lithic materials was more direct, either through procurement or exchange. This relationship between seasonal aggregations and dispersed groups of Middle Woodland populations, in response to fluctuations in available resources, has been suggested as a settlement-subsistence model for the Middle Woodland elsewhere (eg. Spence et al. 1990). The participation of the Dingman Creek site inhabitants in such a pattern is not surprising, but what is of interest is to see the smaller components of this seasonal round in the archaeological record, as this aspect of the model rarely has been documented.

Lastly with respect to chert types and distant contacts, the presence of a point base made on Burlington Chert and a small sample of secondary flakes of possibly Flint Ridge chalcedony offer some suggestions as to the distance and direction of these contacts. In this regard it must be kept in mind that these materials appear in a very small and mundane or day-to-day assemblage. In fact, these items may simply represent prized and curated tool remnants but, given that the sample consists of an almost complete site assemblage, the relative abundance of these remains is considerably high. As noted, these exotic materials have been identified on other Middle Woodland sites in the province. It is remarkable that the communication networks so prevalent during the earlier portions of the Middle Woodland Period may continue into this last phase and perhaps also that they are expressed here outside of the ceremonial context from which such materials are best known. The broader implications of these items may be astounding. Items of a decorative, ornamental or ceremonial nature are not otherwise well represented at the Dingman Creek site yet the exotic cherts identified here hint at the continuation of, and participation in, an earlier and far reaching pattern.

Ceramic decorative techniques such as dentate stamping and pseudo scallop shell impression and the pottery construction technique of coiling are all hallmarks of the Middle Woodland Period in southwestern Ontario. These are replaced rather rapidly at the beginning of the Late Woodland Period by ceramics made using the paddle and anvil technique and decorated with cord wrapped stick impressions (eg. Fox 1990; Spence et al. 1990). The ceramics recovered from Dingman Creek are undoubtedly of Middle Woodland origin but beyond this more precise considerations

are hindered by the small sample size and our poor understanding of the spatial and temporal trends which occur within this ceramic tradition (Spence et al. 1990).

Projectile points from Middle Woodland sites are typically referred to as Saugeen points (Kenyon 1979), exhibiting rather thick cross sections and broad side to corner notches. Aside from other point forms, particularly Vanport and Snyders points, the most pronounced change in point styles appears at the end of the Middle Woodland when Port Maitland (Ritchie 1971) or Raccoon Notched (Mayer-Oaks 1955) points appear. These are a distinctive point form and are restricted in their temporal range. Ritchie attributes these points to the Kipp Island Phase, the last phase of the Middle Woodland Period dating roughly between A.D. 500 and 800 (Ritchie 1969; Spence et al. 1990).

The association of Port Maitland Points with the apparently earlier Saugeen Point at Dingman Creek may be seen to mirror the relationship between Long Bay Points and Port Maitland Points outlined by Ritchie (1971:125). Their co-occurrence suggest that the occupation at Dingman Creek existed during the earlier portion of the Kipp Island phase since later in this period the absence of Saugeen Points and the association of Raccoon Notched points with Levanna points demonstrates the trend toward Late Woodland assemblages (Lantz 1989:8, Lennox 1986a).

Few other sites of the Kipp Island phase have been reported in Ontario. One of the more notable examples is the Child's Grave from Port Maitland, at the mouth of the Grand River (Fox 1990; Ritchie 1969). There, Port Maitland and Levanna points were found in association with a broad range of other artifact forms and it was as a result of these investigations that the distinctive Port Maitland designation was presented as a provisional point type (Ritchie 1971: 125), associated with the Kipp Island phase. During this phase the point type may appear with another, generally earlier provisional type called Long Bay Points (Ritchie 1971).

Since defining the Port Maitland provisional type, this form was subsumed by the Raccoon Notched type as defined by Mayer-Oaks (1955), and subsequently by Lantz's extensive study which also incorporates several varieties of Jack's Reef Points into his expanded definition of the Raccoon Notched type (1989). This is unfortunate since this work appears to mask rather than clarify the changes in projectile point styles during this complex period.

Despite these drawbacks, Lantz's survey of sites with Raccoon Notched Point assemblages in New York and Pennsylvania indicates their popularity to the south of the Great Lakes. This is notable since sites with these point types seem to be relatively scarce in Ontario. Lantz notes that of 236 sites with Raccoon Notched Points, 68% also produced triangular points (Lantz 1989:8), indicating the transitional nature of these assemblages. These triangular, or Levanna points, become the typical point type of the early Late Woodland Period (Ritchie 1971).

The absence of un-notched triangular or Levanna points, and the association of Raccoon Notched or Port Maitland points with thicker side notched points referred to in Ontario as Saugeen points, suggests the Dingman Creek site fits early in the Kipp Island phase and a date of approximately 500-600 A.D. may be suggested from these data.

In Conclusion, Dingman Creek is of interest because of the fact that it helps to fill a small but appreciable gap in our knowledge of the archaeological record from this period. It stands as an example of a small, short term occupation, perhaps in some ways typical of microband encampments, pretty much hypothesized but as yet a poorly represented part of the settlement subsistence pattern of the Middle Woodland period. In some ways these small, single component sites provide badly needed glimpses of life separate from the more prominent, but often hopelessly mixed, macroband settlements occupied for longer periods of time by larger aggregates of the local population because of the nearby concentrations of predictable resources at these locations, during specific seasons of the year. Thankfully such subsistence resources existed to allow the florescence of culture during the Middle Woodland period. However, if we are ever to unravel the complex record of this most exciting period, small components such as the Dingman Creek site must be taken more sincerely for what they are rather than what we would like them to be.

This is a difficult task and it is appropriate to consider the impact of site size and the recognition of similarly small components on the reconstruction of the archaeological record. Initial test pitting of the Dingman Creek site produced a very small sample of cultural material, one that might initially have been considered an isolated find and forgotten. As well, after the area had been ploughed a controlled surface pick-up of artifacts been completed, a broad and generally diffuse spread of cultural material was observed. Again further mitigation efforts may have been abandoned because of the low density of artifacts across this area. Presumably, following the initial survey, had further investigations of the positive test pits included more intensive testing using one metre squares, artifact density recoveries would have led to the abandonment of further work, since yields would have suggested that the site represented a diffuse lithic scatter requiring no further consideration. However, in hindsight, the ploughing of the site and subsequent CSP following contract ploughing and weathering, led to the excavations which were able to focus on a small portion of the larger artifact scatter, a portion that included an occupation area apart from the broader scatter of cultural material that appeared to distract from the heart of the problem (eg. see Figure 2).

What is it that distinguishes these important little time capsules from those that may offer few insights? We have all experienced the latter types of investigations, the ones that we come away from feeling a sense of failure, having spent considerable time trying to make a contribution when, in the end, there is little that can be reliably said. The answer is not a simple one but we all know that it deserves extraordinary attention. Hopefully as we proceed with these investigations and as we destroy or excavate sites, sometimes seemingly on a poorly rationalized whim, we will come up with the criteria that we will need in order to make more informed decisions, not only as cultural resource managers but as archaeologists.

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